

These state and local governments have made the decision to tax certain services and, as a former mayor and State legislator, I respect their ability to do so. However, I agree with my colleagues that Internet access is a special service that should be tax free. The difficult part is trying to define what "Internet access" actually is. We have spent months listening to telecommunications providers, consumers, and local officials define what telecommunications services are and when and where telecommunications taxes should start and stop. Not surprisingly, the groups have disagreed more often than not. Despite the struggle, I believe we came up with a reasonable compromise on the definition and the grandfather clauses, which will give our state and local governments the time they need to phase out taxes imposed prior to the moratorium.

Now that we have passed the moratorium on Internet access taxes, I am anxious to refocus some of our energy on a bill I introduced in both the 107th and 108th Congresses. The Streamlined Sales and Use Tax Act would simplify the extremely cumbersome network of State sales and use taxes and help States begin to recover from years of budgetary shortfalls. The bill would authorize States that have signed the Streamlined Sales and Use Tax Agreement and have passed legislation simplifying their tax system to require all sellers to collect and remit sales taxes.

My streamlined bill, which has 20 cosponsors this year, is a critical bill that many of my colleagues are learning more about and recognizing its growing importance as Internet usage explodes. Two years ago the revenue loss attributed to the Internet sales tax loophole was fairly minimal. Today, the revenue loss has ballooned as online and other remote sales have increased. The States have responded to this budget crisis by signing the Streamlined Sales and Use Tax Agreement and implementing legislation that drastically simplifies their sales and use tax systems. In fact, 21 States have already signed into law the necessary implementing legislation, while 8 others are currently in the process of doing so.

As the States continue to make progress on reforming their sales tax systems, I would urge Congress to make progress on a bill that will provide to the states the authority they need to collect their own taxes. I intend to introduce the Streamlined Sales and Use Tax Act again next year and hope to work with the Finance Committee Chair and other members of the Senate to pass it into law.

In the meantime, I am pleased we will have in place a moratorium that recognizes the importance of the Internet and will allow it to grow and prosper in the coming years.

(At the request of Mr. DASCHLE, the following statement was ordered to be printed in the RECORD.)

#### HONORING DR. RICHARD AXEL

• Mrs. CLINTON. Mr. President, I rise today to honor Dr. Richard Axel, the co-recipient of the 2004 Nobel Prize for Physiology or Medicine. Dr. Axel received this prize for research that he and his co-recipient Dr. Linda Buck conducted on the ways in which our brains process smells. Drs. Axel and Buck are pioneers in the field of sensory biology, and have contributed much to our knowledge of how humans comprehend olfactory information. Their prize-winning research was conducted at Columbia University Medical Center, where Dr. Axel is a University Professor of Biochemistry and Molecular Biophysics and Pathology.

Dr. Axel grew up in Brooklyn and received his earliest training at Manhattan's Stuyvesant High School. Because of his interest in science, he found a job as a glassware washer at a Columbia medical research facility, where he was soon promoted to a research position. By the time he graduated from Columbia College, his work had already been published in scientific journals. Dr. Axel has spent the majority of his subsequent career performing neuroscience research at Columbia University.

I would like to note that Dr. Axel's prize is the latest in a series of distinguished scientific honors earned by residents of New York. The 2003 Nobel Prize for Chemistry was awarded to Dr. Roderick MacKinnon of Rockefeller University, and in 2000, Dr. Eric Kandel of Columbia University was one of the recipients of the Nobel Prize for Physiology or Medicine.

Next month, Dr. Axel will travel to Stockholm to accept the 2004 Nobel Prize for Physiology or Medicine. I ask that all of my colleagues join me in congratulating Dr. Axel for receiving this tremendous honor. I look forward to learning of the future discoveries that will result from Dr. Axel's groundbreaking research.

I ask that an article about Dr. Axel from *In Vivo*, the Columbia University Medical Center campus newspaper, be printed in the RECORD following my remarks.

#### A LIFE IN SCIENCE REWARDED

(By Susan Conova)

Discoveries made at CUMC about the sense of smell go beyond providing a description of what most people think is merely an aesthetic sense. Instead, understanding how the brain distinguishes among a bewildering array of different odors gives scientists a much greater understanding of how the brain works.

"Odors generate specific behaviors and specific thoughts and how that happens is still an unsolved and fascinating mystery in brain science," says Richard Axel, M.D., University Professor of Biochemistry and Molecular Biophysics and Pathology and recipient of the Nobel Prize in Physiology or Medicine on Oct. 4. "Knowing how our perceptions of the external world, including smell, impact our emotions and our behavior will be extremely important in thinking about diseases like schizophrenia to understand how the brain works."

When Dr. Axel and his former postdoctoral researcher Linda Buck, Ph.D., of the Fred

Hutchinson Cancer Research Center and a professor at the University of Washington in Seattle, began their work in the late 1980s, very little was known about the sense of smell.

In 1985, Dr. Buck came across a paper describing the unsolved question of how odors are detected in the nose and was immediately hooked by "the monumental problem and a wonderful puzzle."

"This paper opened up a fascinating new world for me," she wrote earlier this year in the journal *Cell*. "It was estimated that humans could perceive 10,000 or more chemicals as having distinct odors. How could the olfactory system detect such an enormous diversity of chemicals? And how could the nervous system translate this complexity of chemical structures into a multitude of different odor perceptions?"

The questions would remain unanswered unless the receptors responsible for picking up odorants in the air were identified. In 1988, Dr. Buck, working in Dr. Axel's lab at P&S, started tracking them down.

Several initial attempts failed. "Linda was an extremely creative and tenacious Fellow," Dr. Axel says. "The solution to this problem took quite a long time, but the thoughtfulness of her approach made me think she would eventually succeed."

In 1991 Drs. Axel and Buck broke the field open when they published a paper describing an enormous family of genes in mice that coded for 1,000 different receptors. The study was reported in newspapers and other news media worldwide. Later work revealed about 350 functional receptor genes in humans.

"We were quite surprised that up to 5 percent of the genome was taken up by odor receptors," says Dr. Axel, also a member of Columbia's Center for Neurobiology and Behavior. "That's a sharp distinction to the three genes that the visual system uses to discriminate several hundred different hues. It shows that a system like the visual system would be inadequate to distinguish among the rich variety of odors in the environment."

Gerald Fischbach, M.D., executive vice president and dean, says the finding ranks among the most important discoveries of the past 50 years: "The discovery of the genes opened up a field of sensory biology that didn't exist before."

Once the receptor genes were identified, both researchers independently moved to the more complex question of how the brain knows what the nose smells, with the support of the NIH and the Howard Hughes Medical Institute, where the two are investigators. Their labs and others have revealed that part of the answer is that each odor produces a unique spatial pattern, or map, of neuronal activity in the brain's olfactory center. If the olfactory center was laid out like a map of the United States, it would be as if the aroma from a rose would light up Boston, New York, and San Francisco, while rotting food would light up Los Angeles and Denver.

The question now, Dr. Axel says, is figuring out how an organism uses these odor maps. We can look down at the maps of activity in an organism's brain and see what it's smelling, but how does the process actually work within an organism? "To know that the world is interested in our work will, I think, intensify our efforts toward reaching an answer," Dr. Axel says. •

#### ADDITIONAL STATEMENTS

##### CONGRATULATING DR. RHONA CAMPBELL FREE

• Mr. DODD. Mr. President, today, congratulate Dr. Rhona Campbell Free,